

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/264265296>

Screening for personality disorder in probationers: Validation of the Standardised Assessment of...

Article in *Personality and Mental Health* · February 2012

DOI: 10.1002/pmh.177

CITATIONS

15

READS

41

4 authors:



Graham Pluck

Universidad San Francisco de Quito (USFQ)

43 PUBLICATIONS 946 CITATIONS

[SEE PROFILE](#)



Coral Sirdifield

University of Lincoln

22 PUBLICATIONS 127 CITATIONS

[SEE PROFILE](#)



Charlie Brooker

Royal Holloway, University of London

119 PUBLICATIONS 1,202 CITATIONS

[SEE PROFILE](#)



Paul Anthony Moran

University of Bristol

136 PUBLICATIONS 2,795 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Victoria Adolescent Health Cohort Study [View project](#)



QUALICOPC [View project](#)



Screening for personality disorder in probationers: Validation of the Standardised Assessment of Personality—Abbreviated Scale (SAPAS)

G. PLUCK¹, C. SIRDIFIELD², C. BROOKER² AND P. MORAN³, ¹Academic Clinical Psychiatry, University of Sheffield, Sheffield, UK; ²Criminal Justice and Mental Health Group, University of Lincoln, Lincoln, UK; ³King's College London (Institute of Psychiatry), King's College London, London, UK

ABSTRACT

Personality disorder (PD) is an important indicator of future recidivism, and a brief assessment of PD would be of great value to those working in the criminal justice system. There is insufficient research on PD among probation populations. We examined the concurrent validity of a mini-interview for PD, the Standardised Assessment of Personality—Abbreviated Scale (SAPAS), by comparing its performance with that of the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II) in a sample of 40 individuals on probation in Lincolnshire, UK. The SCID-II identified 30/40 (75%) of the sample as having a PD. The most common category was antisocial PD, for which 20/40 (50%) were positive. A cut score of 3 on the SAPAS produced a good balance of sensitivity (0.73) and specificity (0.9) for case identification. We conclude that the SAPAS is a valid screening tool for PD among those on probation and is of potential value to those working in the criminal justice system. Copyright © 2011 John Wiley & Sons, Ltd.

Introduction

Despite the fact that there is a strong association between personality disorder (PD) and antisocial behaviour, very little research has been conducted into the prevalence and impact of PD in probation populations (Department of Health, 2011). The presence of PD among offenders negatively impacts on engagement with prison mental health services (McMurrin & Ward, 2010) and is likely to have a similar negative impact on attendance and engagement with probation services. Moreover,

PD, in the form of psychopathy, is an important predictive variable of future recidivism (Hare, Clark, Grann, & Thornton, 2000). Psychopathy is a construct that has considerable overlap with the DSM-IV antisocial PD, and many offenders with antisocial PD also fulfil criteria for psychopathy (Poythress et al., 2010). Both psychopathy and antisocial PD are significantly associated with antisocial behaviours, particularly violence (Schmeelk, Sylvers, & Lilienfeld, 2008). Indeed, it has been argued that there is a direct functional link between PD and disruptive and antisocial behaviour (Coid,

2002). Therefore, it could be anticipated that there would be an overrepresentation of PDs among those individuals attended by the criminal justice system, including probation services.

During 2008, in England and Wales, there were approximately 83 000 people in prison and 147 000 under probation service supervision (Ministry of Justice, 2009). Thus, at any one time in the UK, those individuals attended by the probation service considerably outnumber those offenders actually in prison. A similar pattern is seen in the USA. In 2008, there were 5.1 million sentenced individuals under community supervision in the USA, compared with 2.3 million prisoners (Glaze & Bonczar, 2009). As those on probation are also living in and interacting with the general community, it is surprising that attempts at recognizing and understanding PD in this population are not given higher priority. One might anticipate a high prevalence of PD among the general probation population by extrapolating prevalence estimates from surveys of prisoners (e.g. [Roberts, Yang, Zhang, & Coid, 2008](#); [Ullrich et al., 2008](#)). However, individuals supervised by probation services will generally have committed less serious offences than those in prison. Furthermore, probationers are not exposed to the prison environment, which itself can exacerbate underlying personality difficulties ([Rotter, Way, Steinbacher, Sawyer, & Smith, 2002](#)). For these reasons, we cannot assume that the prevalence of PD among prisoners is equal to the prevalence among probationers.

A small number of studies have described PD in people on probation, but these studies have been on selected subgroups of offenders, such as sex offenders or life-sentenced individuals released on licence (e.g. [Craissati, Webb, & Keen, 2008](#); [Taylor, 1986](#)). In these selected samples, the reported prevalence of PD varies widely between 17% and 67% ([Blumenthal, Craissati, & Minchin, 2009](#); [Craissati et al., 2008](#); [Dolan, Evans, & Norton, 1995](#); [Taylor, 1986](#))—a variation which is likely to reflect the heterogeneity of the populations sampled in these studies.

One important barrier to the conduct of epidemiological research into PD is the fact that diagnostic interviews are time consuming, require substantial training and are therefore expensive to carry out. An alternative strategy is to use brief screening tools that are designed to be administered by non-specialists but nevertheless are statistically accurate at identifying probable and non-probable cases of disorders. The validity of such tools has to be established in advance. The sensitivity (i.e. the proportion of actual positive cases identified), specificity (i.e. the proportion of non-cases correctly identified as such) and positive predictive power (i.e. the proportion that is correctly identified as either a case or non-case) are considered crucial features of validity in determining the usefulness of a screening tool ([Hunsley & Mash, 2010](#)). These screening tools can then potentially be administered quickly to large samples of individuals and pragmatically act to maximize the identification of mental health concerns ([Bufka, Crawford, & Levitt, 2004](#)).

A number of such self-report questionnaires are available for the purpose of screening for PD. These include the International Personality Disorder Examination Screen ([Lenzenweger, Loranger, Korfine, & Neff, 1997](#)), the Personality Diagnostic Questionnaire—Revised ([Hyer, Skodol, Oldham, Kellman, & Doidge, 1992](#)) and the SCID-II screen ([Ekselius, Lindstrom, Von Knorring, Bodlund, & Kullgren, 1994](#)). Although these instruments are of some value to researchers interested in identifying 'high risk' populations, when compared to a structured interview, their specificity is invariably poor. In addition, they require the ability of the respondent to concentrate on a long set of questions. A brief structured interview would overcome some of these problems. One such interview that has been developed is the Standardised Assessment of Personality—Abbreviated Scale (SAPAS; [Moran et al., 2003](#)). The SAPAS is a brief eight-item screen that is simple to use and displays good psychometric performance in general psychiatric samples as a screening measure. The SAPAS has been validated for use in a number of

European psychiatric samples (Bukh, Bock, Vinberg, Gether, & Kessing, 2010; Gorwood et al., 2010; Moran et al., 2003) and also among those with substance dependence (Hesse and Moran, 2010; Hesse, Rasmussen, & Pedersen, 2008). However, it has yet to be validated for use in forensic samples.

In order to evaluate the validity of a screening tool, it is necessary to establish various statistical features of the screen, such as the sensitivity, specificity and positive predictive power. These are calculated in relation to how well the potential screen performs in relation to the 'gold standard' in diagnosis of the particular disease. For DSM-IV personality disorders, the gold standard is usually taken to be the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II; First, Gibbon, & Spitzer, 1997).

In this study, we used the SCID-II to examine the concurrent validity of the SAPAS in a sample of UK probationers in order to evaluate its potential utility for use in the probation system.

Method

Participants

The study was undertaken as part of a larger cross-sectional survey of psychiatric morbidity in the UK probation population. A stratified random sample of 173 individuals was selected from the overall population of individuals under the supervision of the Lincolnshire county probation service on four specific days between April 2009 and February 2010. All participants were assessed for the presence of depression, psychosis and other mental illnesses. In addition, one of the researchers (GP) assessed a consecutive series of 40 of these cases for PD, and data presented in this paper are based on this subsample of 40 individuals.

The mean age of the probationers in the subsample was 36.2 (range 18–80, SD=14.2) and 34/40 (85%) were male. The age and gender of those in this study were not significantly different from those

of the larger sample. The commonest recorded offence in the subsample was violence against the person, which was committed by 13/40 (32.5%) of the sample. The remaining types of offence consisted of robbery/burglary/theft (8/40, 20%), drug offences (3/40, 7.5%) and sexual offences (3/40, 7.5%). The length of probation orders ranged from 4 months to one open-ended order for a life sentence prisoner released on licence; the median length of probation order was 16 months.

Measures

As part of the battery of assessments, all participants were assessed with the SAPAS which is a very short interview; questions are asked by the interviewer to the participant. The SAPAS consists of eight questions, corresponding to a descriptive statement about the person's normal personality. Each of the questions can be scored 0 (absent) or 1 (present), and the scores on the eight items are added together to produce a total score, ranging from 0 to 8. The individual items of the SAPAS have previously been reported in Moran et al. (2003). The SAPAS has acceptable levels of internal consistency (alpha coefficient for the total score=0.68) and test-retest reliability (Lin's concordance coefficient for the total score=0.89). In psychiatric populations, a score of 3 or more has a positive predictive value for the identification of PD of 0.89 (Moran et al., 2003).

All participants were also interviewed with the SCID-II (First et al., 1997). This is a comprehensive 119-item structured clinical interview which allows identification of the 10 PD subtypes listed in DSM-IV (American Psychiatric Association, 2000). DSM-IV, in fact, includes 10 main PDs, plus two additional in the Appendix (depressive and passive aggressive) which do not form part of the main scheme but were considered to be worthy of further research. In the current report, we only considered the 10 main DSM-IV PD categories. The SCID-II takes around 60min to complete. It has been rigorously tested as a measure of DSM-IV

PDs. SCID-II test–retest reliabilities are generally rated from acceptable to excellent, predictive validity is rated from mild to moderate whereas convergent validity is considered to be acceptable but modest (Rogers, 2001).

Procedure

All participants gave informed consent, and the research was approved by the local research ethics committees. All participants were initially approached and recruited by probation staff and all but two were interviewed at their probation office; two were interviewed in their homes. In all cases, confidentiality was assured to the participants, and they were told that the interviewer did not work for probation services and would not report the issues discussed back to probation officers or to anybody else, unless they revealed plans to harm themselves or others. All interviews were performed by the same researcher (GP). All participants were assessed with the SAPAS at the beginning of the interview and with the SCID-II at the end of the interview. This strategy was deliberately adopted as we were keen to eliminate the possibility of knowledge of SCID-II status biasing the SAPAS assessment; the length of the time gap was also maximized to reduce bias from the SAPAS ratings influencing SCID-II ratings. During the interval between SAPAS and SCID-II administration (approximately 90 min), several other clinical assessments were performed including the Mini International Neuropsychiatric Interview (MINI; Sheehan et al., 1998), which is a validated structured interview covering the main DSM-IV psychiatric disorders. Data from the MINI are not reported in this paper as it was the focus of a separate research question. However, the interviewer was able to use this information in the interpretation of SCID-II responses. In this way, they were able to discount possible signs of PD that were better explained by DSM-IV Axis 1 psychopathology. Individual probationers were given £10/h for their participation; this was paid in store vouchers.

Statistical analyses

The primary aim of this research was to determine the optimal cut-off score on the SAPAS for predicting a DSM-IV diagnosis of PD. To this end, sensitivity, specificity, overall accuracy and positive predictive values were calculated for a range of cut-off scores on the SAPAS. A receiver operator characteristic (ROC) curve analysis was also performed to assess its ability to predict the presence of DSM-IV PDs on the SCID-II. All statistical procedures were carried out using SPSS 14.0.2 (SPSS Inc., Chicago, IL).

Results

Overall, 30/40 (75%) of the sample met DSM-IV criteria for at least one PD on the SCID-II and multiple diagnoses were common. Of the 30 who were positive for any SCID-II PD, the mean number of PD diagnoses was 2.2 (SD=1.5, range=1–7). The most common diagnosis was antisocial PD, with 20/40 (50%) of the cases scoring positively. Other common disorders were schizotypal PD (9/40; 22.5%), paranoid PD (9/40; 22.5%) and borderline PD (8/40; 20%).

Using the general psychiatric cut-off score on the SAPAS of 3, the prevalence of probable PD was 23/40 (58%). The kappa coefficient for the level of agreement between dichotomized SAPAS scores and SCID-II was 0.51, indicating ‘good’ agreement between the two assessment tools (Pines & Everett, 2008). To investigate alternative cut-off scores of the SAPAS, sensitivity, specificity, positive predictive value and the percentage correctly classified on a range of cut-offs were calculated, these are shown in Table 1.

Although the suggested cut score of 3 did not have the greatest overall accuracy, this score provided the optimum balance between sensitivity (0.73) and specificity (0.9). To further investigate the correspondence between the SAPAS and the SCID-II, a ROC curve analysis was performed.

Table 1: Sensitivity, specificity, positive predictive value and overall accuracy of different cut-off scores on the SAPAS at identifying personality disorder in the probation sample

Cut-off score	Sensitivity	Specificity	Positive predictive value	% Correctly classified
1	1.0	0.4	0.86	85
2	0.9	0.6	0.87	83
3	0.73	0.9	0.96	78
4	0.47	0.9	0.93	58
5	0.2	1.0	1.0	15

The plot of the true positive rate against the false positive rate revealed an area under the curve of 0.87 (95% CI: 0.76–1.0).

Discussion

The purpose of the current investigation was to examine the psychometric properties of the SAPAS in a probation population. The suggested cut score for identification of cases in general psychiatric contexts is a score of 3 or more on the SAPAS (Moran et al., 2003). We confirmed that this cut score is also appropriate for use with the probation population. A score of 3 or more has an overall accuracy of 78% and good sensitivity (0.73) and specificity (0.9). The observed positive predictive value indicates that when an individual scores 3 or more on the SAPAS, one can be 96% confident that a correct identification of PD has been made. This suggests that the SAPAS could be of great practical value to those assessing probationers.

Although a cut score of 3 is recommended in this report, a case could also be made for using a cut score of two. This would be appropriate if the particular use of the SAPAS called for a greater emphasis on not missing true cases of PD. We found that a cut score of two has a sensitivity of 0.9 and would adequately fulfil this function. However, this increase in sensitivity is gained in the context of a drop in specificity to 0.6 and in positive predictive value to 0.87. Nevertheless,

this alternative cut score of two could be appropriate in some contexts and is in accordance with proposed criteria for screening tools which suggest that they should optimally have a sensitivity of >0.8 and a specificity of >0.5 (Bagby, Rogers, & Buis, 1994).

The observed relationship between the SAPAS and the SCID-II, as represented by the area under the curve of a ROC analysis, is 0.87. Putting this statistic into context, a diagnostic test would be considered to have ‘good’ accuracy at disease identification if the area under the curve was between 0.80 and 0.89 and ‘excellent’ if above this (Pines & Everett, 2008). Nevertheless, it should be observed that the SCID-II detected PD in 75% of the individuals, whereas the corresponding figure with the SAPAS and a cut score of 3 was only 58%. Despite this discrepancy, the kappa statistic indicated a good level of agreement. Furthermore, the level of false negatives could easily be reduced, by adopting a lower cut-score.

In our sample, three-quarters of the probationers were positive for a PD with the gold standard SCID-II interview. The most commonly detected PD was antisocial, with half of the participants fulfilling criteria. This might be anticipated given that performing criminal acts is one of the diagnostic criteria for this disorder. More surprising is the observation that schizotypal PD was apparent in almost a quarter of the participants. It should be noted that this was only nine individuals from the total sample of 40 met criteria for schizotypal PD and we cannot attribute a great degree of precision to this prevalence. Notwithstanding, an association has been reported to exist between schizotypal PD and psychopathy in criminals (Raine, 2002), and for this reason, one might anticipate that some individuals on probation display features of schizotypal PD.

Overall, there may be a considerable number of personality disordered individuals within the UK national probation system. Our findings are broadly similar to studies of PD within the UK prison system, which have reported that about 66% to 73% of inmates score positive for any PD

(Roberts et al., 2008; Ullrich et al., 2008) and also estimates of PD in the prison population worldwide of around 65% (Fazel & Danesh, 2002). Although our sample size was adequate for a validation study, it did not allow us to examine the prevalence of PD among probationers with any degree of precision and assertions about the overall prevalence of PD in our sample should be made cautiously.

Given that the SAPAS is an adequate screen of DSM-IV PDs as assessed by the SCID-II, screening for PD within probation services could easily be introduced with the SAPAS. It must be emphasized that the SAPAS is merely a screening tool and does not provide a definitive diagnosis of PD. However, it could potentially be used to rapidly identify individuals at high risk of PD. Screening for PD with the SAPAS has the potential to more accurately target time consuming and therefore expensive psychiatric evaluations. The SAPAS thus has the potential to increase efficiency and to reduce costs in those public services that deal with offenders in the community. Screening for PD with the SAPAS has the potential to more accurately target expensive and time consuming psychiatric evaluations. Other potential tools for screening are available, for example, the SCID-II includes a self-report questionnaire version which consists of a subset of questions from the full SCID-II (Ekselius et al., 1994). However, the SCID-II screening questionnaire is not an optimal tool for use in the criminal justice system as it requires the ability to fluently read, and literacy problems are very common among prisoners and probationers. It also requires the respondent to concentrate on a large number of true/false items which would test the patience and concentration of many prisoners and probationers. In contrast, the SAPAS is a mini-interview, which is not affected by literacy ability and can be completed very rapidly. It has been argued that when routine screening is introduced, there are often both harmful and useful consequences, and these should be evaluated in advance (Getz, Sigurdsson, & Hetlevik, 2003). Considering the large numbers of people within the criminal

justice system that would likely score positive, would this realistically alter their care or management? Furthermore, when labels of PD are applied, these often have negative consequences for the person with the diagnosis. Many people with PD assert that their treatment deteriorates after receiving the description (Ramon, Castillo, & Morant, 2001). Nevertheless, studies of people with PDs on probation have reported that it is associated with a poor quality of life (Bouman, Van Nieuwenhuizen, Schene, & De Ruiter, 2008). Furthermore, a recent study on various PDs within the USA prison system found that PD, in general, was associated with suicidal behaviour and increased psychological distress (Lamis, Langhinrichsen-Rohling, & Simpler, 2008). In addition to this, PD is an important predictor of recidivism (Hare et al., 2000). In the light of these observations, we would argue that knowledge of a probationer's personality status provides invaluable prognostic information. Our study supplies evidence about the suitability of a particular screening tool, and further research and debate may be needed on the potential benefit and harm of routinely screening for PD within the criminal justice system.

Our findings need to be interpreted with regard to certain methodological limitations. First, we used a relatively small sample size, thus limiting the precision of our derived prevalence estimates. Further research to replicate these findings is warranted, and until this is performed with a larger sample, the current findings should be considered preliminary. Second, for practical and economic reasons, the same researcher administered both the SAPAS and the SCID-II, raising the possibility of information bias. Given these constraints, we deliberately chose to administer the SAPAS first, in order to ensure that SAPAS assessment was uncontaminated by knowledge of SCID-II status. It is possible that the reverse phenomenon may have occurred, i. e. contamination of SCID-II assessment by knowledge of SAPAS status. However, we think this is unlikely, given the semi-structured nature of the SCID-II. Our results provide evidence of the

concurrent validity of the SAPAS as a screen for DSM-IV PDs in samples of probationers. In addition, although preliminary, our findings suggest that the SAPAS is a valid screening tool for PDs in general forensic contexts and is potentially of value to those working in the criminal justice system.

Acknowledgements

This report presents independent research commissioned by the National Institute for Health Research (NIHR) under the Research for Patient Benefit programme. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health. We would like to thank Ms Sue Bowler for providing administrative services essential to this project.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR* (4th ed.). Washington, DC: American Psychiatric Association.
- Bagby, R. M., Rogers, R., & Buis, T. (1994). Detecting malingering and defensive responding on the MMPI-2 in a forensic inpatient sample. *Journal of Personality Assessment*, 78, 69–86. DOI: 10.1207/s15327752jpa6202_2
- Blumenthal, S., Craissati, J., & Minchin, L. (2009). The development of a specialist hostel for the community management of personality disordered offenders. *Criminal Behaviour and Mental Health*, 19/1, 43–53. DOI: 10.1002/cbm.720
- Bouman, Y. H., Van Nieuwenhuizen, C., Schene, A. H., & De Ruiter, C. (2008). Quality of life of male outpatients with personality disorders or psychotic disorders: A comparison. *Criminal Behaviour and Mental Health*, 18/5, 279–291. DOI: 10.1002/cbm.703
- Bufka, L. F., Crawford, J. I., & Levitt, J. T. (2004). Brief screening assessments for managed and primary care. In M. M. Anthony, & D. H. Barlow (Eds.), *Handbook of assessment and treatment planning for psychological disorders* (pp. 38–66). New York: The Guilford Press.
- Bukh, J. D., Bock, C., Vinberg, M., Gether, U., & Kessing, L. V. (2010). Clinical utility of Standardised Assessment of Personality—Abbreviated Scale (SAPAS) among patients with first episode depression. *Journal of Affective Disorders*, 127, 199–202. DOI: 10.1016/j.jad.2010.05.023
- Coid, J. W. (2002). Personality disorders in prisoners and their motivation for dangerous and disruptive behaviour. *Criminal Behaviour and Mental Health*, 12/3, 209–226. DOI: 10.1002/cbm.497
- Craissati, J., Webb, L., & Keen, S. (2008). The relationship between developmental variables, personality disorder, and risk in sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 20/2, 119–138. DOI: 10.1177/1079063208317464
- Department of Health/National Offender Management Service Offender Personality Disorder Team. (2011). *Consultation on the offender personality disorder pathway implementation plan*. London: Department of Health. Retrieved March 10, 2000, from: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124489.pdf
- Dolan, B., Evans, C., & Norton, K. (1995). Multiple axis-II diagnoses of personality disorder. *The British Journal of Psychiatry*, 166/1, 107–112.
- Ekselius, L., Lindstrom, E., Von Knorring, L., Bodlund, O., & Kullgren, G. (1994). SCID II interviews and the SCID screen questionnaire as diagnostic tools for personality disorders in DSM-III-R. *Acta Psychiatrica Scandinavica*, 90, 120–123. DOI: 10.1111/j.1600-0447.1994.tb01566.x
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23000 prisoners: A systematic review of 62 surveys. *Lancet*, 359/9306, 545–550. DOI: 10.1192/bp.28.11.393
- First, M. B., Gibbon, M., & Spitzer, R. L. (1997). *User's guide for the structured clinical interview for DSM-IV axis II personality disorders*. Arlington, VA: American Psychiatric Press, Inc.
- Getz, L., Sigurdsson, J. A., & Hetlevik, I. (2003). Is opportunistic prevention in the consultation ethically justifiable? *British Medical Journal*, 327, 498–500. DOI: 10.1136/bmj.327.7413.498
- Glaze, L. E., & Bonczar, T. P. (2009). Probation and parole in the United States, 2008. Bureau of Justice Statistics Bulletin 2009. Retrieved September 1, 2010, from: <http://bjs.ojp.usdoj.gov/content/pub/pdf/ppus08.pdf>
- Gorwood, P., Rouillon, F., Even, C., Falissard, B., Corruble, E., & Moran P. (2010). Treatment response in major depression: Effects of personality dysfunction and prior depression. *The British Journal of Psychiatry*, 196, 139–142.
- Hare, R. D., Clark, D., Grann, M., Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences & the Law*, 18, 623–645. DOI: 10.1002/1099-0798(200010)18:5<623::AID-BSL409>3.0.CO;2-W
- Hesse, M., & Moran, P. (2010) Screening for personality disorder with the Standardised Assessment of Personality: Abbreviated Scale (SAPAS): Further evidence of concurrent validity. *BMC Psychiatry*, 10, 10. DOI: 10.1186/1471-244X-10-10
- Hesse, M., Rasmussen, J., & Pedersen, M. K. (2008). Standardised Assessment of Personality—A study of validity and

- reliability in substance abusers. *BMC Psychiatry*, 8, 7. DOI: 10.1186/1471-244X-8-7
- Hunsley, J., & Mash, E. J. (2010). The role of assessment in evidence based practice. In M. M. Anthony, & D. H. Barlow (Eds.), *Handbook of assessment and treatment planning for psychological disorders* (2nd ed., pp. 3–21). New York: The Guilford Press.
- Hyer, S. E., Skodol, A. E., Oldham, J. M., Kellman, H. D., & Doidge, N. (1992). Validity of the Personality Diagnostic Questionnaire—Revised: A replication in an outpatient sample. *Comprehensive Psychiatry*, 33, 73–77. DOI: 10.1016/0010-440X(92)90001-7
- Lamis, D. A., Langhinrichsen-Rohling, J., & Simpler, A. H. (2008). The associations among personality disorder symptoms, suicide proneness and current distress in adult male prisoners. *Personality and Mental Health*, 2, 21–229. DOI: 10.1002/pmh.52
- Lenzenweger, M. F., Loranger, A. W., Korfine, L., & Neff, C. (1997). Detecting personality disorders in a nonclinical population. Application of a 2-stage procedure for case identification. *Archives of General Psychiatry*, 54, 345–351.
- McMurran, M., & Ward, T. (2010). Treatment readiness, treatment engagement, and behaviour change. *Criminal Behaviour and Mental Health*, 20, 75–85. DOI: 10.1002/cbm.762
- Ministry of Justice. (2009). *Offender management caseload statistics 2008*. London: Ministry of Justice. Retrieved September 1, 2010, from: <http://www.justice.gov.uk>
- Moran, P., Leese, M., Lee, T., Walters, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality—Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *The British Journal of Psychiatry*, 183, 228–232.
- Pines, J. M., & Everett, W. W. (2008). *Evidence-based emergency care: Diagnostic testing and clinical decision rules*. Chichester, UK: John Wiley & Sons.
- Poythress, N. G., Edens, J. F., Skeem, J. L., Lilienfeld, S. O., Douglas, K. S., Frick, P. J., Patrick, C. J., Epstein, M., & Wang, T. (2010). Identifying subtypes among offenders with antisocial personality disorder: A cluster-analytic study. *Journal of Abnormal Psychology*, 119, 389–400. DOI: 10.1037/a0018611
- Ramon, S., Castillo, H., & Morant, N. (2001). Experiencing personality disorder: A participative research. *The International Journal of Social Psychiatry*, 47, 1–15. DOI: 10.1177/002076400104700401
- Roberts, A., Yang, M., Zhang, T., & Coid, J. (2008). Personality disorder, temperament, and childhood adversity: Findings from a cohort of prisoners in England and Wales. *The Journal of Forensic Psychiatry & Psychology*, 19/4, 460–483. DOI: 10.1080/14789940801936597
- Rogers, R. (2001). *Handbook of diagnostic and structured interviewing*. New York: The Guilford Press.
- Raine, A. (2002). Schizotypal and borderline features in psychopathic criminals. *Personality and Individual Differences*, 13, 717–721. DOI: 10.1016/0191-8869(92)90242-H
- Rotter, M., Way, B., Steinbacher, M., Sawyer, D., & Smith, H. (2002). Personality disorders in prison: Aren't they all antisocial? *The Psychiatric Quarterly*, 73/4, 337–349. DOI: 10.1023/A:1020468117930
- Schmeelk, K. M., Sylvers, P., & Lilienfeld, S. O. (2008). Trait correlates of relational aggression in a nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders*, 22, 269–283. DOI: 10.1521/pedi.2008.22.3.269
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., & Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *The Journal of Clinical Psychiatry*, Suppl 20, 34–57.
- Taylor, P. J. (1986). Psychiatric disorder in London's life-sentenced offenders. *British Journal of Criminology*, 26, 63–78.
- Ullrich, S., Deasy, D., Smith, J., Johnson, B., Clarke, M., Broughton, N., & Coid, J. (2008). Detecting personality disorders in the prison population of England and Wales: Comparing case identification using the SCID-II screen and the SCID-II clinical interview. *The Journal of Forensic Psychiatry & Psychology*, 19/3, 301–322. DOI: 10.1080/14789940802045182

Address correspondence to: Dr Graham Pluck, Academic Clinical Psychiatry, The University of Sheffield, The Longley Centre, Norwood Grange Drive, Sheffield, S5 7JT, UK. Email: g.pluck@sheffield.ac.uk